ADEQ Arizona Department of Environmental Quality

DRAFT FACT SHEET

ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES)

This document gives pertinent information concerning the reissuance of the AZPDES permit listed below. This facility is a groundwater remediation system and is considered to be a minor facility under the NPDES program. The effluent limitations contained in this permit will maintain the Water Quality Standards listed in Arizona Administrative Code (A.A.C.) R18-11-101 et. seq. This permit is proposed to be issued for a period of 5 years.

Permittee's Name:	Pima County Dept. of Environmental Quality, Solid Waste Division (Pima County DEQSWD)
Permittee's Mailing Address:	5301 W. Ina Road, Tucson AZ 85743
Facility Name:	El Camino del Cerro WQARF Site Groundwater Treatment System
Facility Address or Location:	3243 W. Diamond Street, Tucson, AZ 85743
County:	Pima
Contact Person(s): Phone/e-mail address	Al Wylie, Principal Hydrologist 520-724-9794, AlWylie@pima.gov
AZPDES Permit Number:	AZ0026093
Inventory Number:	106359

I. STATUS OF PERMIT(s)	
AZPDES permit applied for:	Renewal
Date application received:	5/26/2017
Date application was determined administratively complete:	6/14/2017
Previous permit number (if different):	N/A
Previous permit expiration date:	11/26/2017
Pima County DEQSWD does not have and is not required to have an Aquifer Protection Permit (APP) for discharges from this facility. Pursuant to A.R.S. § 49-250(B)(11), closed facilities such as the former El Camino del Cerro Landfill are exempt from APP requirements. A.R.S. § 49-201(7)(a) defines a closed	

facility as one that ceased operation before January 1, 1986 with no intent to resume operation. Pursuant to A.R.S. § 49-250(B)(18)(d), a remedial action such as this facility which has been approved by ADEQ is exempt from APP requirements.

II. GENERAL FACILITY INFORMATION	
Type of Facility:	Groundwater pump and treat system to remove low-level volatile organic compounds to the atmosphere prior to discharge.
Facility Location Description:	The facility is located approximately ¼ mile west of I-10 and ¼ mile north of West El Camino del Cerro Road in Tucson.
Flow rate:	Flow is continuous up to 250 gallons per minute (gpm) or 0.360 million gallons per day (mgd).
Treatment Process:	Pumps and treats groundwater from well CDC-EX2 that contains certain volatile organic compounds (VOCs) with air-stripping technology using a vapor phase granular activated carbon media for treatment prior to discharge.
The El Camino del Cerro Landfill was a former gravel pit that was operated as a municipal solid waste landfill from 1973 through 1977, when it was inundated by flooding of the Santa Cruz River before being closed and capped with an earthen cap. Subsequent investigations identified groundwater contamination down-gradient of the former landfill. The former El Camino del Cerro Landfill is part of a WQARF, a.k.a. State Superfund, remediation site. Since June 2009, an active groundwater remediation Pilot Study has been conducted at the site.	

III. RECEIVING WATER	
The State of Arizona has adopted water quality standards to protect the designated uses of its surface waters. Streams have been divided into segments and designated uses assigned to these segments. The water quality standards vary by designated use depending on the level of protection required to maintain that use.	
Receiving Water :	Santa Cruz River from the Agua Nueva WWTP outfall to Baumgartner Road
River Basin:	Santa Cruz-Rio Magdalena-Rio Sonoyta Basin.
Outfall Location(s):	Outfall 001: Township 13 South, Range 13 East, Section 17 Latitude 32° 17’ 51.45” N, Longitude 111° 02’ 19.96” W
The outfall discharges to, or the discharge may reach, a surface water listed in Appendix B of A.A.C. Title 18, Chapter 11, Article 1.	
Designated uses for the receiving water listed above:	Aquatic and Wildlife effluent dependent water (A&Wedw) Partial Body Contact (PBC)
Is the receiving water on the 303(d) list?	No, and there are no TMDL issues associated.

Given the uses stated above, the applicable narrative water quality standards are described in A.A.C. R18-11-108, and the applicable numeric water quality standards are listed in A.A.C. R18-11-109 and in Appendix A thereof. There are two standards for the Aquatic and Wildlife uses, acute and chronic. In developing AZPDES permits, the standards for all applicable designated uses are compared and limits that will protect for all applicable designated uses are developed based on the standards.

IV. DESCRIPTION OF DISCHARGE

The following is the effluent quality as submitted by the permittee on 5/26/17. The El Camino del Cerro WQARF Site groundwater treatment system is designed to remove volatile organic compounds from the contaminated groundwater prior to discharge.

Parameters	Units	Maximum Daily Discharge Concentration
Trichloroethylene (TCE)	µg/L	1.9
Tetrachloroethylene (PCE)	µg/L	1.0
Cyanide	µg/L	10.3
Zinc	µg/L	10.2

V. STATUS OF COMPLIANCE WITH THE EXISTING AZPDES PERMIT

Date of most recent inspection:	9/9/2015; No potential violations were noted as a result of this inspection.
DMR files reviewed:	01/01/2014 through 04/01/2017
Lab reports reviewed:	08/2016 through 04/2017
DMR Exceedances:	Cyanide (September 2015). No other exceedances were noted.
NOVs issued:	None
NOVs closed:	N/A
Compliance orders:	None

VI. PROPOSED PERMIT CHANGES

The following table lists the major changes from the previous permit in this draft permit.

Parameter	Existing Permit	Proposed permit	Reason for change
Reporting Location	Mail in hard copies of DMRs and other attachments	DMRs and other reports to be submitted	Language added to support the NPDES electronic DMR

		electronically through myDEQ portal	reporting rule that became effective on December 21, 2015.
Beryllium, Cadmium, Chromium total, Chromium VI, Copper, Iron, Lead, and Silver	Assessment Level	Effluent characterization	Data submitted indicated no reasonable potential (RP) for an exceedance of a standard.
Cyanide and Selenium	Assessment Level	Limit	Data submitted indicated RP for an exceedance of a standard.
Zinc	Limit	Effluent characterization	Data submitted indicated no RP for an exceedance of a standard.
Discharge Effluent Characterization Tables 4.c. – 4.f. (selected volatiles organic compounds, acid extractable compounds, base-neutral compounds, and additional parameters)	Effluent characterization	Monitoring not required	Monitoring no longer required because there were no reasonable potential of these parameters to exceed a standard.

Anti-backsliding considerations – "Anti-backsliding" refers to statutory (Section 402(o) of the Clean Water Act) and regulatory (40 CFR 122.44(l)) requirements that prohibit the renewal, reissuance, or modification of an existing NPDES permit that contains effluent limits, permit conditions, or standards that are less stringent than those established in the previous permit. The rules and statutes do identify exceptions to these circumstances where backsliding is acceptable. This permit has been reviewed and drafted with consideration of anti-backsliding concerns.

Limits for the following parameter have been removed from the permit because evaluation of current data allows the conclusion that no reasonable potential (RP) for an exceedance of a standard exists:

- Zinc (Outfall 001)

This is considered allowable backsliding under 303(d)(4). The effluent limitations in the current permit for this parameter were based on state standards, the respective receiving waters are in attainment for this parameter, and the revisions are consistent with antidegradation requirements. See Section XII for information regarding antidegradation requirements.

Limits are retained in the draft permit for parameters where reasonable potential (RP) for an exceedance of a standard continues to exist or is indeterminate. In these cases, limits will be recalculated using the most current Arizona Water Quality Standards (WQS). If less stringent limits result due to a change in the WQS then backsliding is allowed in accordance with 303(d)(4) if the new limits are consistent with antidegradation requirements and the receiving water is in attainment of the new standard; see Section XII for information regarding antidegradation requirements. No limits are less stringent due to a change in the WQS in this permit.

VII. DETERMINATION OF EFFLUENT LIMITATIONS and ASSESSMENT LEVELS

When determining what parameters need monitoring and/or limits included in the draft permit, both technology-based and water quality-based criteria were compared and the more stringent criteria applied.

Technology-based Limitations:
There are no promulgated technology-based limits for a groundwater treatment system such as the El Camino del Cerro WQARF Site GWTS. However, it has been demonstrated that this technology allows for efficient removal of volatile organic compounds (VOCs), and the discharge can be sampled with low detection limits. Based on a review of the data submitted by the applicant and using best professional judgment (BPJ), technology-based limits have been set for 1,2-cis-dichloroethylene (c-DCE), and trichloroethylene (TCE), tetrachloroethylene (PCE) and vinyl chloride. These parameters have been detected in the groundwater. The proposed limits are based on Safe Drinking Water Act Maximum Contaminant Levels (MCLs) consistent with other similar remedial project dischargers.

Numeric Water Quality Standards: As outlined in A.A.C. R18-11-109 and Appendix A:
Per 40 CFR 122.44(d)(1)(ii), (iii) and (iv), discharge limits must be included in the permit for parameters with "reasonable potential" (RP), that is, those known to be or expected to be present in the effluent at a level that could potentially cause any applicable numeric water quality standard to be exceeded. RP refers to the possibility, based on the statistical calculations using the data submitted, or consideration of other factors to determine whether the discharge may exceed the Water Quality Standards. The procedures used to determine RP are outlined in the *Technical Support Document for Water Quality-based Toxics Control (TSD)* (EPA/505/2-90-001). In most cases, the highest reported value for a parameter is multiplied by a factor (determined from the variability of the data and number of samples) to determine a "highest estimated value". This value is then compared to the lowest applicable Water Quality Standard for the receiving water. If the value is greater than the standard, RP exists and a water quality-based effluent limitation (WQBEL) is required in the permit for that parameter. RP may also be determined from BPJ based on knowledge of the treatment facilities and other factors. The basis for the RP determination for each parameter with a WQBEL is shown in the table below.

The proposed permit limits were established using a methodology developed by EPA. Long Term Averages (LTA) were calculated for each designated use and the lowest LTA was used to calculate the average monthly limit (AML) and maximum daily limit (MDL) necessary to protect all uses. This methodology takes into account criteria, effluent variability, and the number of observations taken to determine compliance with the limit and is described in Chapter 5 of the TSD. Limits based on A&W criteria were developed using the "two-value steady state wasteload allocation" described on page 99 of the TSD. When the limit is based on human health criteria, the monthly average was set at the level of the applicable standard and a daily maximum limit was determined as specified in Section 5.4.4 of the TSD.

Mixing Zone: Arizona water quality rules require that water quality standards be achieved without mixing zones unless the permittee applies and is approved for a mixing zone. Since the receiving stream for this discharge is ephemeral prior to the discharge, no water is available for a mixing zone and all water quality criteria are applied at end-of pipe. This means that the effluent concentration must meet stream standards.

Assessment Levels (ALs): ALs are listed in Part I.B of the permit. An AL differs from a discharge limit in that an exceedance of an AL is not a permit violation. Instead, ALs serve as triggers, alerting the permitting authority when there is cause for re-evaluation of RP for exceeding a water quality standard, which may result in new permit limitations. The AL numeric values also serve to advise the permittee of the analytical sensitivity needed for meaningful data collection. Trace substance monitoring is required when there is uncertain RP (based on non-detect values or limited datasets) or a need to collect additional data or monitor treatment efficacy on some minimal basis. A reopener clause is included in the draft permit should future monitoring data indicate water quality standards are being exceeded.

The requirement to monitor for these parameters is included in the draft permit according to A.A.C. R18-11-104(C) and Appendix A. ALs listed for each parameter were calculated in the same manner that a limit would have been calculated (see Numeric Water Quality Standards Section above).

The following trace substances were not included as limits or assessment levels in the draft permit due to a lack of RP based on best professional judgment (BPJ): ammonia, barium, *E. coli*, nitrates, nitrites, manganese, oil and grease, total residual chlorine. The numeric standards for these pollutants are well above what would be expected from a WWTP discharge.

Hardness: The permittee is required to sample hardness as $CaCO_3$ at the same time the trace metals are sampled because the water quality standards for some metals are calculated using the water hardness values. The receiving water must be tested for hardness within 100 feet upstream of the point of discharge (Outfall 001) at the same time that a hardness dependent metal (cadmium, chromium III, copper, lead, nickel, silver and zinc) sample is taken. If no receiving water is present at the time of sampling, the effluent must be tested for hardness instead. See the hardness definition in Appendix A, Part B. Note: When reporting the hardness on the Discharge Monitoring Report, enter Code "9" (Conditional Monitoring) for either the effluent or receiving water hardness that was not tested.

Whole Effluent Toxicity (WET): WET testing is required in the draft permit (Parts I.C and IV) to evaluate the discharge according to the narrative toxic standard in A.A.C. R18-11-108(A)(5), as well as whether the discharge has RP for WET per 40 CFR 122.44(d)(iv).

WET testing for chronic toxicity shall be conducted using the following three surrogate species:

- *Ceriodaphnia dubia* (water flea) – for evaluating toxicity to invertebrates
- *Pimephales promelas* (fathead minnow) – for evaluating toxicity to vertebrates
- *Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum or Raphidocelis subcapitata)* (a green alga) – for evaluating toxicity to plant life

ADEQ does not have a numeric standard for Whole Effluent Toxicity. However, ADEQ adopted the EPA recommended chronic toxicity benchmark of 1.0 TUc for a four day exposure period. Using this benchmark, the action levels for WET included in the draft permit were calculated in accordance with the methods specified in the *TSD*. The species chosen for WET testing are as recommended in the *TSD* and in *Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs*.

An exceedance of action level will trigger follow-up testing to determine if effluent toxicity is persistent. If toxicity above action level is found in a follow-up test, the permittee will be required to conduct a Toxicity Reduction Evaluation (TRE) and possibly a Toxicity Identification Evaluation (TIE) to identify the source of toxicity and reduce toxicity. These conditions are required to ensure that toxicants are not discharged in amounts that are toxic to organisms [A.A.C. R18-11-108(A)(5)]. A reopener clause is included in accordance with 40 CFR Parts 122 and 124 and AAC R18-9-B906.

The draft permit requires chronic toxicity tests on discrete samples of the final effluent for WET testing in order to have consistency with the type of sample required for other parameters requiring monitoring in this permit. WET sampling must coincide with testing for all the parameters in Parts I.A and B of the draft permit, when testing of those parameters is required, to aid in the determination of the cause of toxicity if toxicity is detected. Additional procedural requirements for the WET test are included in the proposed permit.

The required WET monitoring frequency for this facility is consistent with the WET testing frequency required for facilities with a similar design flow. The draft permit requires WET test results to be reported on discharge monitoring reports and submittal of the full WET lab report to ADEQ.

Effluent Characterization (EC): In addition to monitoring for parameters assigned either a limit or an AL, sampling is required to assess the presence of pollutants in the discharge at certain minimum frequencies for additional suites of parameters, whether the facility is discharging or not. This monitoring is specified in Tables 4.a. through 4.b., *Effluent Characterization Testing*, as follows:

• Table 4.a. – General Chemistry and Microbiology: ammonia, BOD-5, *E. coli*, total residual chlorine (TRC), dissolved oxygen, total Kjeldahl nitrogen (TKN), nitrate/nitrite, oil and grease, pH, phosphorus, temperature, total dissolved solids (TDS), and total suspended solids (TSS)
• Table 4.b. – Selected Metals, Hardness, Cyanide, and WET

NOTE: Some parameters listed in Tables 4.a. and 4.b. are also listed in Tables 1 or 2. In this case, the data from monitoring under Tables 1 or 2 may be used to satisfy the requirements of Tables 4.a. and / or 4.b., provided the specified sample types are the same. In the event the facility does not discharge to a water of the U.S. during the life of the permit, EC monitoring of representative samples of the effluent is still required.

The purpose of EC monitoring is to characterize the effluent and determine if the parameters of concern are present in the discharge and at what levels. This monitoring will be used to assess RP per 40 CFR 122.44(d)(1)(iii)). EC monitoring is required in accordance with 40 CFR 122.43(a), 40 CFR 122.44(i), and 40 CFR 122.48(b) as well as A.R.S. §49-203(A)(7). If pollutants are noted at levels of concern during the permit term, this permit may also be reopened to add related limits or conditions.

Permit Limitations and Monitoring Requirements:
The table that follows summarizes the parameters that are limited in the permit and the rationale for that decision. Also included are the parameters that require monitoring without any limitations or that have not been included in the permit at all and the basis for those decisions. The corresponding monitoring requirements are shown for each parameter. In general, the regulatory basis for monitoring requirements is per 40 CFR §122.44(i) *Monitoring requirements*, and 40 CFR §122.48(b), *Required monitoring*; all of which have been adopted by reference in A.A.C. R18-9-A905, *AZPDES Program Standards*.

Parameter	Lowest Standard / Designated Use	Maximum Reported Daily Value	No. of Samples	Estimated Maximum Value	RP Determination	Proposed Monitoring Requirement/ Rationale (1)
Flow	- - -	- - -	- - -	- - -	- - -	Discharge flow is to be monitored on a continual basis using a flow meter.
Chlorine, Total Residual (TRC)	11 µg/L/ A&Wedw chronic	No Data	0	N/A	N/A	Monitoring is not required. Groundwater is not expected to contain levels that exceed the standard.
E. coli	30-day geometric mean: 126 cfu /100 mL (4 sample minimum) Single sample maximum: 575 cfu /100 mL/ PBC	No Data	0	N/A	N/A	Monitoring is not required. Groundwater is not expected to contain levels that exceed the standard.
pH	Minimum: 6.5 Maximum: 9.0 A&Wedw and PBC A.A.C. R18-11-109(B)	8.14 S.U.	6	N/A	WQBEL is included.	pH is to be monitored using a discrete sample and a WQBEL is set. 40 CFR Part 136 specifies that grab samples must be collected for pH. At least one sample must coincide with WET testing to aid in the determination of the cause of toxicity if toxicity is detected.
Temperature	No applicable numeric standard	No data	0	N/A	N/A	Effluent temperature is to be monitored for characterization by discrete sample. 40 CFR Part 136 specifies that discrete samples must be collected for temperature.
Ammonia	Standard varies with temperature and pH	No data	0	N/A	N/A	Monitoring is not required. Groundwater is not expected to contain ammonia at levels that exceed the standard.
Nutrients (Total Nitrogen and Total Phosphorus)	No applicable standards	No data	0	N/A	N/A	Monitoring required for effluent characterization.
Oil & Grease	Narrative water quality standard.	No data	0	N/A	N/A	Monitoring is not required. Groundwater is not expected to contain levels that exceed the standard.
Antimony	600 µg/L/ A&Wedw chronic	< 0.5 µg/L	3	1.4 µg/L	No RP	Monitoring required for effluent characterization.
Arsenic	150 µg/L/ A&Wedw chronic	1.5 µg/L	3	8.4 µg/L	No RP	Monitoring required for effluent characterization.
Beryllium	5.3 µg/L/ A&Wedw chronic	< 0.2 µg/L	5	0.42 µg/L	No RP	Monitoring required for effluent characterization.
Boron	186,667 µg/L/ PBC	141 µg/L	1	1,861 µg/L	No RP	Monitoring required for effluent characterization.
Cadmium (2)	5.76 µg/L/ A&Wedw chronic	< 0.08 µg/L	4	0.188 µg/L	No RP	Monitoring required for effluent characterization.
Chromium (Total)	No Applicable Standard	0.78 µg/L	4	N/A	N/A	Monitoring required as an indicator parameter for Chromium VI.

Parameter	Lowest Standard / Designated Use	Maximum Reported Daily Value	No. of Samples	Estimated Maximum Value	RP Determination	Proposed Monitoring Requirement/ Rationale (1)
Chromium VI	11 µg/L/ A&Wedw chronic	No Data	0	N/A	No RP (Based on total chromium data)	Monitoring required for effluent characterization.
Copper (2)	27 µg/L/ A&Wedw chronic	1.4 µg/L	4	6.58 µg/L	No RP	Monitoring required for effluent characterization.
Cyanide	9.7 µg/L/ A&Wedw chronic	10.3 µg/L	4	48.4 µg/L	RP Exists	Monitoring is required and a WQBEL is set.
Hardness	No applicable standard. Hardness is used to determine standards for specific metal parameters.	447 mg/L	3	N/A	N/A	A&W standards for cadmium, chromium III, copper, lead, nickel, silver and zinc used for RP determinations were based on the average receiving water hardness value of 360 mg/L. Monitoring for hardness is required whenever monitoring for hardness dependent metals is required.
Hydrogen Sulfide	2 µg/L/ A&Wedw chronic	No Data	0	N/A	RP Indeterminate (No Data)	Monitoring is required for sulfides as an indicator parameter for hydrogen sulfide. If sulfides are detected, monitoring for hydrogen sulfide is required for the remainder of the permit term.
Iron	1,000 ug/L / A&Wedw chronic	112 µg/L	5	470 µg/L	No RP	Monitoring required for effluent characterization.
Lead (2)	9.82 µg/L / A&Wedw chronic	< 0.1 µg/L	4	0.235 µg/L	No RP	Monitoring required for effluent characterization.
Mercury	0.01 µg/L/ A&Wedw chronic	< 0.2 µg/L	4	0.94 µg/L	RP Indeterminate (Hi LOQ)	Monitoring required and an assessment level remains in the permit.
Nickel (2)	154 µg/L/ A&Wedw chronic	1.9 µg/L	3	10.6 µg/L	No RP	Monitoring required for effluent characterization.
Selenium	2 µg/L/ A&Wedw chronic	0.82 µg/L	4	4 µg/L	RP Exists	Monitoring required and a WQBEL is set in the permit.
Silver (2)	29.1 µg/L/ A&Wedw acute	< 10 µg/L	4	23.5 µg/L	No RP	Monitoring required for effluent characterization.
Sulfides	No applicable standard	< 0.1 µg/L	3	N/A	N/A	Indicator parameter for hydrogen sulfide. Monitoring for effluent characterization required. If sulfides are detected, monitoring for hydrogen sulfide is required for the remainder of the permit term.
Thallium	75 µg/L/ PBC	< 0.1 µg/L	3	0.28 µg/L	No RP	Monitoring required for effluent characterization.
Zinc (2)	347 µg/L/ A&Wedw acute and chronic	10.2 µg/L	4	47.9 µg/L	No RP	Monitoring required for effluent characterization.
1,2-cis-dichloroethylene (c-DCE)	70 µg/L/ PBC 70 µg/L/ Technology-based limit based on BPJ	2.7 µg/L	27	N/A	N/A	Monitoring required and a TBEL remains in the permit.
Tetrachloroethylene (PCE) (Perchloroethylene)	680 µg/L/ A&Wedw chronic 5 µg/L/ Technology-based limit based on BPJ	<1.0 µg/L	27	N/A	N/A	Monitoring required and a TBEL remains in the permit.
Trichloroethylene (TCE)	280 µg/L/ PBC 5 µg/L/ Technology-based limit based on BPJ	1.9 µg/L	27	N/A	N/A	Monitoring required and a TBEL remains in the permit.

Parameter	Lowest Standard / Designated Use		Maximum Reported Daily Value	No. of Samples	Estimated Maximum Value	RP Determination	Proposed Monitoring Requirement/ Rationale (1)
Vinyl chloride	2,800 µg/L/ PBC 2 µg/L/ Technology-based limit based on BPJ		< 1.0 µg/L	27	N/A	N/A	Monitoring required and a TBEL remains in the permit.
Whole Effluent Toxicity (WET)	No toxicity (A.A.C. R18-11-108(A)(6)	*Pseudo-kirchneriella subcapitata (3)*	1.0 TUc	1	N/A	RP Indeterminate (4)	Monitoring required and an action level is set.
		Pimephales promelas	1.0 TUc	1	N/A	RP Indeterminate (4)	Monitoring required and an action level is set.
		Ceriodaphnia dubia	1.0 TUc	1	N/A	RP Indeterminate (4)	Monitoring required and an action level is set.

Footnotes:
(1) The monitoring frequencies are as specified in the permit.
(2) Hardness-dependent metal - the standard is for this parameter is based on the average hardness value of the effluent or receiving water as indicated above.
(3) Formerly known as *Selenastrum capricornutum or Raphidocelis subcapitata.*
(4) Monitoring with ALs or Action Levels always required for these parameters unless RP exists and limits are set.

VIII. NARRATIVE WATER QUALITY STANDARDS

All narrative limitations in A.A.C. R18-11-108 that are applicable to the receiving water are included in Part I, Sections E and F of the draft permit.

IX. MONITORING AND REPORTING REQUIREMENTS (Part II of Permit)

Section 308 of the Clean Water Act and 40 CFR Part 122.44(i) require that monitoring be included in permits to determine compliance with effluent limitations. Additionally, monitoring may be required to gather data for future effluent limitations or to monitor effluent impacts on receiving water quality.

Monitoring frequencies are based on the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. Monitoring frequencies for some parameters may be reduced in second term permits if all monitoring requirements have been met and the limits or ALs for those parameters have not been exceeded during the first permit term.

Discrete (i.e., grab) samples are specified in the permit for all parameters. The groundwater quality is not expected to vary significantly during a 24-hour period. The quality of the discharge is not expected to be highly variable.

Monitoring locations are specified in the permit (Part I.A and Part I.I.) in order to ensure that representative samples of the influent and effluent are consistently obtained.

The requirements in the permit pertaining to Part II, Monitoring and Reporting, are included to ensure that the monitoring data submitted under this permit is accurate in accordance with 40 CFR 122.41(e). The permittee has the responsibility to determine that all data collected for purposes of this permit meet the requirements specified in this permit and is collected, analyzed, and properly reported to ADEQ.

The permit (Part II.A.2) requires the permittee to keep a Quality Assurance (QA) manual at the facility, describing sample collection and analysis processes; the required elements of the QA manual are outlined.

Reporting requirements for monitoring results are detailed in Part II, Sections B.1 and 2 of the permit, including completion and submittal of Discharge Monitoring Reports (DMRs).

The permittee is responsible for conducting all required monitoring and reporting the results to ADEQ on DMRs or as otherwise specified in the permit.

Electronic reporting. The US EPA has published a final regulation that requires electronic reporting and sharing of Clean Water Act National Pollutant Discharge Elimination System (NPDES) program information instead of the current paper-based reporting (Federal Register, Vol. 80, No. 204, October 22, 2015). Effective December 21, 2016, the Federal rule requires permittees to make electronic submittals of any monitoring reports and forms called for in their permits. ADEQ has created an online portal called myDEQ that allows users to submit their discharge monitoring reports and other applicable reports required in the permit.

Requirements for retention of monitoring records are detailed in Part II.D of the permit.

X. BIOSOLIDS REQUIREMENTS (Part III in Permit)

Not Applicable

XI. SPECIAL CONDITIONS (Part V in Permit)

Permit Reopener

This permit may be modified based on newly available information; to add conditions or limits to address demonstrated effluent toxicity; to implement any EPA-approved new Arizona water quality standard; or to re-evaluate reasonable potential (RP), if assessment levels in this permit are exceeded [A.A.C. R18-9-B906 and 40 CFR Part 122.62 (a) and (b)].

XII. ANTIDEGRADATION

Antidegradation rules have been established under A.A.C. R18-11-107 to ensure that existing surface water quality is maintained and protected. The discharge from the El Camino del Cerro WQARF Site will be to an effluent-dependent water. Effluent quality limitations and monitoring requirements have been established under the proposed permit to ensure that the discharge will meet the applicable water quality standards. As long as the permittee maintains consistent compliance with these provisions, the designated uses of the receiving water will be presumed protected, and the facility will be deemed to meet currently applicable antidegradation requirements under A.A.C. R18-11-107.

XIII. STANDARD CONDITIONS

Conditions applicable to all NPDES permits in accordance with 40 CFR, Part 122 are attached as an appendix to this permit.

XIV. ADMINISTRATIVE INFORMATION

Public Notice (A.A.C. R18-9-A907)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft AZPDES permit or other significant action with respect to an AZPDES permit or application. The basic intent of this requirement is to ensure that all interested parties have an opportunity to comment on significant actions of the permitting agency with respect to a permit application or permit. This permit will be public noticed in a local newspaper after a pre-notice review by the applicant and other affected agencies.

Public Comment Period (A.A.C. R18-9-A908)

Rules require that permits be public noticed in a newspaper of general circulation within the area affected by the facility or activity and provide a minimum of 30 calendar days for interested parties to respond in writing to ADEQ. After the closing of the public comment period, ADEQ is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

Public Hearing (A.A.C R18-9-A908(B))

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if the Director determines there is a significant amount of interest expressed during the 30-day public comment period, or if significant new issues arise that were not considered during the permitting process.

EPA Review (A.A.C. R18-9-A908(C))

A copy of this draft permit and any revisions made to this draft as a result of public comments received will be sent to EPA Region 9 for review. If EPA objects to a provision of the draft, ADEQ will not issue the permit until the objection is resolved.

XV. ADDITIONAL INFORMATION

Additional information relating to this proposed permit may be obtained from:

Arizona Department of Environmental Quality
Water Quality Division – AZPDES Individual Permits Unit
Attn: Jacqueline Maye
1110 West Washington Street
Phoenix, Arizona 85007

Or by contacting Jacqueline Maye at (602) 771 – 4607 or by e-mail at jpm@azdeq.gov.

XVI. INFORMATION SOURCES

While developing effluent limitations, monitoring requirements, and special conditions for the draft permit, the following information sources were used:

1. AZPDES Permit Application Form 1 and 2C received May 26, 2017, along with supporting data, facility diagram, and maps submitted by the applicant with the application forms.

2. ADEQ files on Camino del Cerro WQARF Groundwater Pumping.

3. ADEQ Geographic Information System (GIS) Web site.

4. Arizona Administrative Code (AAC) Title 18, Chapter 11, Article 1, *Water Quality Standards for Surface Waters*, adopted January 31, 2009.

5. A.A.C. Title 18, Chapter 9, Article 9. *Arizona Pollutant Discharge Elimination System* rules.

6. Code of Federal Regulations (CFR) Title 40:
   Part 122, *EPA Administered Permit Programs: The National Pollutant Discharge Elimination System.*
   Part 124, *Procedures for Decision Making*.
   Part 133. *Secondary Treatment Regulation.*

7. EPA Technical Support Document for Water Quality-based Toxics Control dated March 1991.

8. *Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs*, US EPA, May 31, 1996.

9. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA /821-R-02-013).

10. U.S. EPA NPDES Permit Writers' Manual, September 2010.